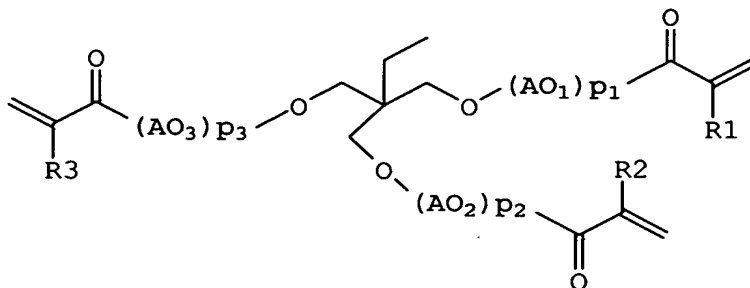


IN THE CLAIMS:

1. (Currently amended) An ester mixture comprising at least two esters selected from ~~these of~~ the formulae 1a, 1b, or 1c, wherein esters F of the formula ~~I-a~~ 1a have the following a structure:



where wherein AO as AO<sub>1</sub>, AO<sub>2</sub>, and AO<sub>3</sub> as, independently, are at each instance EO, PO, or BO

~~where wherein~~ EO is O-CH<sub>2</sub>-CH<sub>2</sub>-,

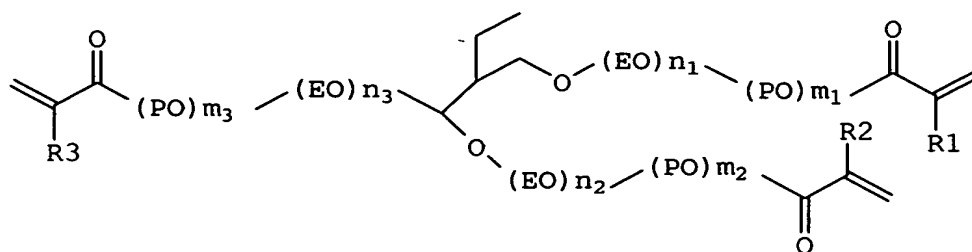
PO ~~is~~ independently at each instance is O-CH<sub>2</sub>-CH(CH<sub>3</sub>)- or O-CH(CH<sub>3</sub>)-CH<sub>2</sub>-,

BO ~~is~~ independently at each instance is O-CH<sub>2</sub>-CH(CH<sub>2</sub>-CH<sub>3</sub>)- or O-CH(CH<sub>2</sub>-CH<sub>3</sub>)-CH<sub>2</sub>-,

p<sub>1</sub> + p<sub>2</sub> + p<sub>3</sub> is 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, or 75, and

R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are independently H or CH<sub>3</sub>,

and esters F of the formula ~~I-b~~ 1b have the following a structure:



~~where~~ wherein EO is O-CH<sub>2</sub>-CH<sub>2</sub>-,

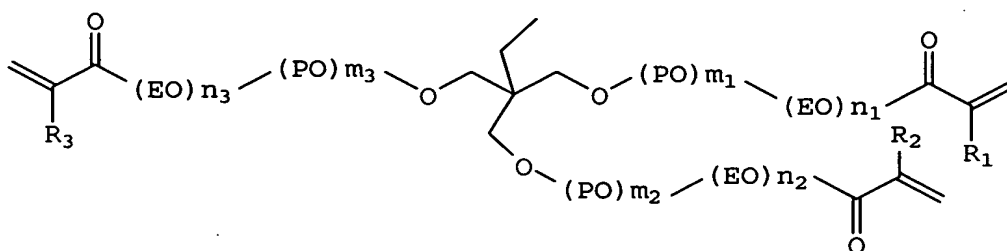
PO ~~is~~ independently at each instance is  
O-CH<sub>2</sub>-CH(CH<sub>3</sub>)- or

O-CH(CH<sub>3</sub>)-CH<sub>2</sub>-, and

n<sub>1</sub> + n<sub>2</sub> + n<sub>3</sub> is 28, 29, 30, 31, 32, 33, 34,  
35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48,  
49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, or 60, and  
m<sub>1</sub> + m<sub>2</sub> + m<sub>3</sub> is 4, 5, 6, 7, 8, 9, 10, 11, 12,  
or 13,

R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are independently H or CH<sub>3</sub>,

and esters F of the formula I-e 1c have the  
~~following~~ a structure:



~~where~~ wherein EO is O-CH<sub>2</sub>-CH<sub>2</sub>-,

PO ~~is~~ independently at each instance is  
O-CH<sub>2</sub>-CH(CH<sub>3</sub>)- or O-CH(CH<sub>3</sub>)-CH<sub>2</sub>-,

n<sub>1</sub> + n<sub>2</sub> + n<sub>3</sub> is 28, 29, 30, 31, 32, 33, 34,  
35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48,  
49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, or 60,

$m_1 + m_2 + m_3$  is 4, 5, 6, 7, 8, 9, 10, 11, 12, or 13, and

R1, R2, R3 are independently H or CH3.

2. (Currently amended) ~~An ester F in The~~  
ester mixtures ~~according to~~ of claim 1 wherein AO ~~is~~ at  
all instances for the esters F is EO, PO, or BO,  
~~preferably EO.~~

3. (Currently amended) The ester mixtures  
~~according to~~ of claim 1 ~~or 2~~ wherein only esters of the  
formula 1a and 1b, or 1a and 1c, or 1b and 1c and  
~~preferably 1b and 1c~~ are present.

4. (Currently amended) The ester mixtures  
~~according to any of claims 1 to 3~~ claim 1 wherein  
esters of the formula 1b or 1c are present in the ester  
mixture at not less than 10% by weight, ~~preferably not~~  
~~less than 20% by weight, especially not less than 30%~~  
~~by weight.~~

5. (Currently amended) ~~An ester F in The~~  
ester mixtures ~~according to any of claims 1 to 4~~ claim  
1 wherein  $p_1 + p_2 + p_3$  is 30, 31, 32, 33, 34, 35, 36,  
37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, or  
50.

6. (Currently amended) ~~An ester F in The~~  
ester mixtures ~~according to any of claims 1 to 5~~ claim  
1 wherein  $n_1$ ,  $n_2$ , and  $n_3$  of esters F are,  
independently, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,  
19, or 20.

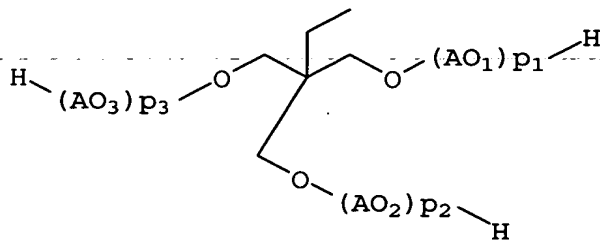
7. (Currently amended) ~~An ester F in The~~  
 ester mixtures ~~according to any of claims 1 to 6~~ claim  
1 wherein m1, m2, and m3 of esters F are,  
 independently, 1, 2, 3, 4, or 5.

8. (Currently amended) ~~An ester F in The~~  
 ester mixtures ~~according to any of claims 1 to 7~~ claim  
1 wherein m1 + m2 + m3 of esters F is 5 or 10.

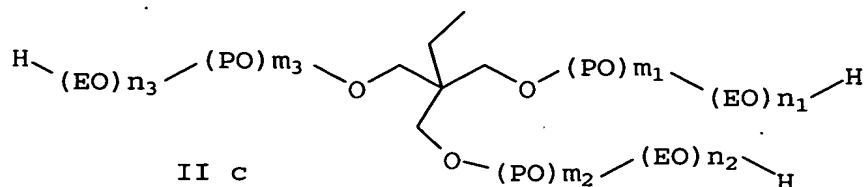
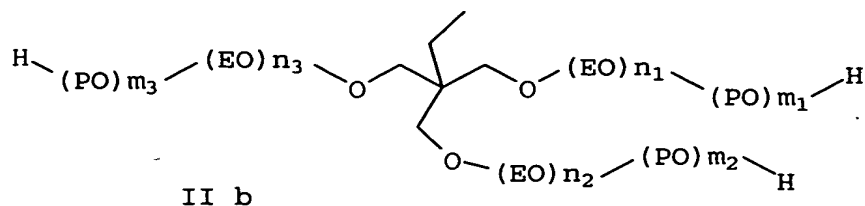
9. (Currently amended) ~~An ester F in The~~  
 ester mixtures ~~according to any of claims 1 to 8~~ claim  
1 wherein n1 + n2 + n3 of esters F is 30 or 50.

10. (Currently amended) ~~An ester F in The~~  
 ester mixtures ~~according to any of claims 1 to 9~~ claim  
1 wherein R1, R2, and R3 are identical ~~and preferably~~  
 H.

11. (Currently amended) A process for  
 preparing an ester mixture of esters F ~~according to any~~  
~~of claims~~ claim 1 to 10 from mixtures of alkoxyated  
 trimethylolpropanes of the formula II a, II b ~~or~~ , and  
 II c



II a



~~where AO, EO, PO, p1, p2, p3, n1, n2, n3, m1,~~  
~~m2 and m3 are each as defined in any of claims 1 to 10,~~  
 with (meth)acrylic acid, comprising the steps  
 of

a) reacting a the mixture of alkoxyated trimethylolpropanes with (meth)acrylic acid in the presence of at least one esterification catalyst C, and of at least one polymerization inhibitor D, and optionally ~~also~~ of a water-azeotroping solvent E to form ~~an~~ the ester F,

b) optionally removing from the reaction mixture some or all of the water formed in a), during and/or after a),

f) optionally neutralizing the reaction mixture,

h) when a solvent E ~~was~~ is used, optionally removing ~~this~~ the solvent E by distillation, and/or

i) stripping the reaction mixture with a gas which is inert under the reaction conditions.

12. (Currently amended) A process according to claim 11, wherein

~~the~~ a molar excess of (meth)acrylic acid to the mixture of alkoxyated trimethylolpropanes is at least 3.15:1, and

the optionally neutralized (meth)acrylic acid present in the reaction mixture after the last process step substantially remains in the reaction mixture.

13. (Currently amended) A The process ~~according to either of claims~~ claim 11 ~~and 12~~ wherein the (meth)acrylic acid is not more than 75% by weight removed from the reaction mixture obtained after the last step, which reaction mixture contains the ester mixture of esters F.

14. (Currently amended) A The process ~~according to any of claims~~ claim 11 ~~to 13~~ wherein the reaction mixture obtained after the last process step, which comprises the ester mixture of esters F, has a DIN EN 3682 acid number of at least 25 mg of KOH/g.

15. (Currently amended) A The process ~~according to any of claims~~ claim 11 ~~to 14~~ wherein the reaction mixture obtained after the last process step, which comprises the ester mixture of esters F, has a (meth)acrylic acid content of at least 0.5% by weight.

16. (Currently amended) A The process ~~according to any of claims claim~~ 13 ~~to 17~~ wherein the molar ratio of (meth)acrylic acid to the mixture of alkoxyated trimethylolpropanes in reaction a) is at least 15:1.

17. (Currently amended) A process for preparing a crosslinked hydrogel comprising the steps of

k) polymerizing an ester mixture of esters F ~~according to any of claims claim~~ 1 ~~to 18~~, with (meth)acrylic acid, ~~with optionally with an~~ additional monoethylenically unsaturated ~~compounds~~ compound N, and optionally ~~also~~ at least one further copolymerizable hydrophilic monomer M<sub>1</sub> in the presence of at least one free-radical initiator K and optionally ~~of~~ at least one grafting base L,

l) optionally postcrosslinking the reaction mixture obtained from k),

m) drying the reaction mixture obtained from k) or l), and

n) optionally grinding and/or sieving the reaction mixture obtained from k), l), or m).

18. (Currently amended) A process for preparing a crosslinked hydrogel, comprising steps a) to i) ~~according to any of claims claim~~ 11 ~~to 16~~ and additionally

k) polymerizing the reaction mixture from one of ~~stages~~ steps a) to i) of claim 11 if performed, ~~with optionally with an~~ additional monoethylenically unsaturated ~~compounds~~ compound N and optionally ~~also~~ at

least one further copolymerizable hydrophilic monomer M, in the presence of at least one free-radical initiator K and optionally of at least one grafting base L,

l) optionally postcrosslinking the reaction mixture obtained from k),

m) drying the reaction mixture obtained from k) or l), and

n) optionally grinding and/or sieving the reaction mixture obtained from k), l), or m).

19. (Currently amended) ~~Polymer obtainable~~  
A polymer prepared according to a the process according  
~~to either of claims claim 17 and 18.~~

20. (Currently amended) ~~Crosslinked A~~  
crosslinked hydrogel comprising at least one  
hydrophilic monomer M in ~~copolymerized~~ polymerized form  
crosslinked with an ester mixture of esters F ~~according~~  
~~to any of claims claim 1 to 10.~~

21. (Cancelled)

22. (Cancelled)

23. (Currently amended) A composition of  
matter comprising

from 0.1% to 40% by weight of an ester  
mixture of esters F ~~according to any of claims claim 1~~  
~~to 10 and (meth)acrylic acid,~~

0.5-99.9% by weight of at least one  
hydrophilic monomer M,



0-10% by weight of at least one  
esterification catalyst C,  
0-5% by weight of at least one polymerization  
inhibitor D, and  
0-10% by weight of a solvent E,  
with the proviso that the sum total is always  
100% by weight.

24. (Currently amended) The composition ~~of~~  
~~matter according to~~ of claim 23 wherein ~~every~~ each  
ester F is present in the ester mixture at not more  
than 2% by weight based on the hydrophilic monomer M.

25. (Currently amended) ~~A~~ The composition  
~~of matter according to either of claims~~ claim 23 and  
24, further comprising  
a diluent G ~~ad 100% by weight.~~

26. (Currently amended) ~~Crosslinked~~ A  
crosslinked hydrogel ~~obtainable~~ prepared from a  
composition ~~of matter according to any of claims~~ claim  
23 ~~to 25~~ and additionally

~~l) — optionally posterosslinking the reaction~~  
~~mixture obtained~~ postcrosslinked

~~m) — drying the reaction mixture obtained~~  
~~directly or from l), and~~

~~n) — optionally grinding and/or sieving the~~  
~~reaction mixture obtained directly or from l) or m).~~

27. (Cancelled)

28. (Cancelled)

29. (New) The esters F in ester mixtures of claim 2 wherein AO in each instance is EO.

30. (New) The ester mixtures of claim 3 wherein only esters of the formulae 1b and 1c are present.

31. (New) The ester mixtures of claim 4 wherein esters of the formulae 1b and 1c are present in the ester mixture at not less than 20% by weight.

32. (New) The ester mixtures of claim 31 wherein esters of the formula 1b and 1c are present in the ester mixture at not less than 30% by weight.

33. (New) The ester mixtures of claim 10 wherein R1, R2, and R3 are H.

34. (New) A polymer prepared according to the process of claim 18.

35. (New) An article comprising a polymer prepared according to the method of claim 17.

36. (New) The article of claim 27 selected from the group consisting of a hygiene article, a packaging method, and a nonwoven.

37. (New) A method of absorbing an aqueous fluid comprising contacting the aqueous fluid with a hydrogel-forming polymer internally crosslinked using a mixture of esters F of claim 1.